

TASK
PERFORM RESCUE-HOIST OPERATIONS

WARNING

Ensure that crewmembers in the cabin area are wearing a safety harness secured to a tiedown ring anytime the cabin doors are open. The crewmember riding the hoist will be secured either to the aircraft or to the jungle penetrator.

CONDITIONS: In a UH-60 helicopter equipped with a rescue-hoist system.

STANDARDS: Appropriate common standards plus these additions/modifications:

1. Rated.

- a. Conduct a thorough crew and passenger safety briefing.
- b. Perform a preflight inspection of the rescue hoist per TMs 1-1520-237-10/CL.
- c. Perform rescue-hoist procedures per TMs 1-15-20-237--10/CL, FM 8-10-6, TC 1-201, and the unit SOP.
- d. Maintain appropriate hover altitude ± 5 feet.
- e. Do not allow drift to exceed ± 5 feet from the intended hover point.

2. Nonrated.

- a. Perform a preflight inspection of the rescue hoist per TMs 1-1520-237-10/CL and the unit SOP.
- b. Operate the rescue-hoist pendant.

DESCRIPTION:

1. Crew actions.

- a. The PC will conduct a thorough crew briefing and ensure all crewmembers are familiar with rescue-hoist operations, emergency procedures, communication procedures, lowering the flight medic, and lifting the patient of the ground using the hoist or aircraft. He will also ensure that all crewmembers understand "CUT CABLE" procedures.
- b. The P* will remain focused primarily outside the aircraft throughout the maneuver for aircraft control and obstacle avoidance. He will announce the intended point of hover and remain centered over the target with corrections from the NCM.
- c. The P and NCM will assist in clearing the aircraft and will provide adequate warning of obstacles. They will also assist the P* in maintaining a stable hover by providing the P* with information regarding the drift of the aircraft. The P will also monitor cockpit indications. The P will be able to operate the control panel for the rescue hoist if necessary.
- d. The NCM will ensure that the hoist is configured and will also ensure that all lifting devices (i.e. Jungle penetrator, SKED/Stokes litter, and survivor's slings) are secured in the aircraft before takeoff.

e. The NCM will conduct the hoist operation per TC 1-201, TMs 1-1520-23-7-10/CL, and the unit SOP.

NOTE: The P* should be in the right seat which allows the P in the left seat to visually monitor the entire operation.

2. Procedures.

a. General Recovery Procedures Over Land. Crewmembers alerted approximately 5 minutes prior to arrival at pickup site. Crewmembers complete all required checks (i.e. Rescue Hoist Control Panel switches set, Hoist circuit breakers set, ICS selector switches set, and crewmembers reposition for hoist operations). Make the approach into the wind if possible and plan to terminate the approach at an altitude that will clear the highest obstacle. Select an appropriate reference point to maintain heading and position over the ground. Once stabilized over pickup site perform hoist operations IAW FM 8-10-6, TC 1-201, TMs 1-1520-237--10/CL, and the unit SOP.

b. Inert Patient Recovery. General format is the same as over land except: The MO is lowered on the hoist and secures the patient to the recovery device. Prior to deploying, all crewmembers will be briefed on method of recovery (simultaneous or singular recovery of the patient and MO) and a radio communications check should be made between the pilot and MO.

c. General Recovery Procedures Over Water. General format is the same as over land except: A smoke device may be used to determine wind direction and velocity; terminate the approach at a 100 foot hover, 20 feet prior to reaching the patient; deploy the recovery device and allow to contact the water before reaching the patient. All crewmembers will wear floatation devices. Operations become increasingly more hazardous as references are reduced (open water versus a small lake, or ship versus small boat), sea state increases (calm to chop to breaking condition with increasing wave height), and visibility decreases (horizon becomes same color as water, water spray or rain on windshield, sunny mid-day Vs twilight).

NOTE: The NCM will advise the P* when the person/equipment is in position on the jungle penetrator. The NCM will perform hoist operations IAW the standard words and phrases IAW unit SOP. The NCM will secure jungle penetrator or stokes litter upon completion of the hoisting operation. Should difficulty in maintaining a stable hover occur, the NCM will extend additional cable as "slack" to preclude inadvertent jerking of the cable.

NIGHT OR NVG CONSIDERATIONS: Use proper scanning techniques to avoid spatial disorientation.

1. For unaided night flight, the landing light and searchlight should be operational. If an NVG filter is installed, it should be removed.

2. When NVGs are used, hovering with minimum drift is difficult and requires proper scanning techniques and crewmember coordination. If possible, an area with adequate ground contrast and reference points should be used.

3. Visual obstacles such as shadows should be treated the same as physical obstacles.

4. Spatial disorientation can be overwhelming during over water operations at night. If there are visible lights on the horizon or if the shoreline can be seen, the pilot may opt to approach the survivor(s) so the aircraft is pointed toward these references, if the wind permits. If no other references exist, deploy chemlights to assist in maintaining a stable hover.

TRAINING AND EVALUATION REQUIREMENTS:

1. **Training.** Training will be conducted in the aircraft.
2. **Evaluation.** Evaluation will be conducted in the aircraft.

REFERENCES: Appropriate common references plus the following: FM 8-10-6

